

Installation and first operation of the IFMIF LIPAC Injector on the Rokkasho site in Japan

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Abstract: The IFMIF LIPAC Injector, dedicated to high intensity deuteron beam production has been designed, built and tested at CEA/Saclay between 2008 and 2012. After the completion of the acceptance tests at Saclay, the Injector has been fully disassembled and prepared for the 2 long months shipment between Europe and Japan. Beginning of 2014, the 35 large packages have been opened and the Injector re-installation has been performed between March and May 2014. Then after the check-out phase, the production of the first hydrogen plasma and first proton beam occurred in October and November 2014. Hydrogen and deuteron beam commissioning is now in progress after having proceeded with the final tests on the entire Injector equipment including high power diagnostics. After a brief summary of the achieved results obtained at Saclay, this article reports the different phases of the injector installation pointing out the safety and security needs, as well as the first beam production results in Japan. Detailed operation and commissioning results are reported in a second article[1].

[1] Y. Okumura et al., "Operation and commissioning of the LIPAC Injector" (to be adapted with the effective title of the second article)